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ABSTRACT

In an effort to cross boundaries and make connections between theory, research, and academic planning, Prince George's Community College in Maryland (PGCC) and the University of Maryland University College's Institute for Research on Adults in Higher Education (IRAHE) developed a partnership using national and institutional research to link theory and academic planning. In doing so, both institutions developed new programs responsive to the needs of a diverse population of adult learners. This paper reports how multi-institutional, theoretical research influenced the design and development of intervention programs at a large, predominantly African-American community college. Sections of the document include theory, research and planning, hypotheses regarding increased student achievement, the IRAHE study of risk and promise, and analyses of student success at PGCC. Information is also included about the R3 Academy, a two-semester program of developmental and credit instruction. Three tables help to explain achievement variance. In addition, the Data Action Memo, defined as a new communication tool for crossing boundaries and making connections between institutional research and planning, is discussed in relation to PGCC curriculum development. Appended is the first memo sent to academic administrators and chairpersons in the fall of 1997. (Contains 23 references.) (AS)

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Improving Minority Student Success: Crossing Boundaries and Making Connections between Theory, Research, and Academic Planning

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Improving Minority Student Success: Crossing Boundaries and Making Connections between Theory, Research, and Academic Planning

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Abstract. In a successful effort to cross boundaries and make connections between theory, research, and academic planning, Prince George's Community College (PGCC) and the University of Maryland University College's Institute for Research on Adults in Higher Education (IRAHE) developed a productive partnership using national and institutional research to link theory and academic planning. In doing so, both institutions developed new and highly successful programs responsive to the needs of a diverse population of adult learners. The paper reports how multi-institutional, theoretical research guided targeted, institutional research that influenced the design and development of successful intervention programs at a large, predominantly African-American community college.

Theory, Research, and Planning

Theory-less planning in higher education can produce programs that work. The problem is that we often don't understand why they work. More importantly, we have few guarantees that such practices will work in the future, or in other contexts. In the rush to solve problems or plan strategically, college planners may institute what appear to be ready-made solutions that neither address the root causes of a problem, nor prepare for future challenges. In contrast, the intervention

activities and programs discussed in this paper were founded on theory, national educational research, and institutional research.

The literature on college and university planning emphasizes the critical role of research. Norris and Poulton (1991) observe that institutional research "searches out the emerging issues and challenges that require changes in strategy." They contend that information and analytical research support are much more than "an afterthought used to provide piles of data for planning committees to 'chew on' while the planning process unfolds." (p. 15-16) They continue:

> Properly designed... a program of analytical support can provide key environmental intelligence, can manage and identify the issues confronting the organization, and can move the process along by focusing attention and forcing decisions at appropriate junctures.

This paper demonstrates the critical role national and institution-based research played in the development of sound educational theory and effective academic planning, particularly as applied to improving minority student success. A specific communications mechanism for connecting research and campus decisionmaking–the Data Action Memo–is also discussed.

Educational Theory: The Diverse Students Program Literature Review

The Institute for Research on Adults in Higher Education (IRAHE) at the University of Maryland University College coordinated a six-year effort among ten colleges and universities searching for ways to improve both access to college and success in college of ethnically-diverse students. (The ethnic minority populations in institutions participating in IRAHE's Diverse Students Program--DSP--ranged from

12 percent to over 95 percent.) The DSP had five projects, one of which–the Study of Risk and Promise–will be discussed here. An extensive literature review influenced the research designs of all DSP projects.

Underlying the DSP and its Study of Risk and Promise was the premise that college efforts to attract and retain students take place within a tug-of-war between forces that enhance the odds of success and forces that work against success. This fundamental premise was stated years ago by Lewin (1951):

> Changing the ratio of a population of adults who enter college or who succeed once enrolled is a matter of changing a field of *countervailing forces* in which one set of forces works against the increase of the ratio and a second set of forces works toward the increase. The measure of the effectiveness of such a change can thus be defined as one of the degree of movement of the locus of the equilibrium point between theses countervailing forces (italics added).

The goal of the DSP projects was to develop Model Action Plans (MAPs) strengthening the forces working for student success and minimizing the forces working against success.

Cross (1981), in her study of adult learners, classified the forces enhancing or retarding success into three types: (1) *dispositional*, internal to the individual; (2) *institutional*, reflecting college policies and culture; and (3) *situational*, non-college factors including home, work, and community. The IRAHE leaders developed a multi-institutional research design involving a common survey and campus-specific MAPs to explore how colleges might influence or accommodate factors in the three domains (individual, college, and non-college environment) to increase access and success of adult learners of diverse ethnicity. Their research design was influenced by conclusions drawn from an extensive literature review (Sheckley, 1994):

> The synthesis of the literature reviews presents a vexing problem. On the one hand, we can easily document the problem that we are addressing. We have ample evidence that students from diverse populations do not enroll in the same proportions as do their Caucasian counterparts. Once enrolled, students from these diverse populations neither persist in their studies nor succeed in them to the degree evidenced by Caucasian students.
>
> When, however, we look for causes behind the discrepancies, the literature provides very little help. In general, the research indicates that very little difference exists between the Caucasian and the non-Caucasian groups when the studies sample students actually enrolled in the same colleges and programs. When differences are noted, the effect size is typically very small. Even the focus group discussions seem at a loss to surface factors that are distinctive to one ethnic group or another.

In an attempt to overcome the "vexing problem" and discover useful connections, the IRAHE review of the literature revealed two sets of factors interacting with opposing effects. The first set, related to student success, included an individual's degree of goal commitment, expectations, motivation, self-efficacy, prior academic success, and perception of the relationship between college studies and personal career and life goals. The second set, barriers to success, included time constraints, competing duties, limitations on financial resources, and resistance from family, employers, or primary others. The IRAHE literature review found that race/ethnicity *per se* was not a significant factor affecting student success. However, if prejudice in an institution's climate lowered students' sense of welcome or social integration, the IRAHE researchers suggested that this could affect the success rates of those subjected to the prejudice. Thus campus climate and the overall college environment (the institutional domain in IRAHE terminology) had to be added to individual characteristics and factors in the non-college environment to create the complete research design.

Hypotheses

How might the achievement of students from diverse populations be increased? Lead IRAHE scholars Keeton and Sheckley (1994) succinctly summarized their view by arguing that minority student success rested on teamwork between learner and college:

> On the students's part there must be aspiration and commitment, a sense of capability or self-efficacy, an adequate level of energy for application to appropriate tasks, persistence, and a readiness and skill in seeking and using help.
>
> On the college's part, there must be a challenge to learn with support and, to make the goal achievable, help with learning strategies, focus and coordination of effort, academically able faculty who teach gladly and well, an environment that motivates the student to use the institution's resources to learn and, of course, accessibility of those resources (including teachers, books, computers, financial aid, etc.).

Crossing the boundaries and making connections between the learner and the college became the focus of understanding why diverse students do or do not succeed at a particular institution of higher education.

The IRAHE Study of Risk and Promise

A major part of the IRAHE Diverse Students Program was the Study of Risk and Promise (Cubeta, 1997). This study was based on responses gathered by a written survey completed by 542 students from six institutions (two universities and four community colleges). The sample reflected the pooled student population of the six colleges and included approximately 21 percent African-Americans, 6 percent Hispanics, and 7 percent other racial/ethnic minorities. The ratio of female to male students in both sample and survey population was approximately 2:1.

The problem investigated was: How can successes of adult students from diverse populations in higher education programs be increased? This question was translated into a more specific one for study: What variables are most predictive of academic success in college, and how are these variables related to ethnic group membership?

Success, the study concluded, was not a single thing against which all students could be assessed. A student seeking immediate job training and employment will have a different measure of success than a student aiming for a Ph.D. Thus, programs and interventions designed to enhance student success must be tailored to the *type* of success being targeted. High grade point averages (GPAs) were not predicted by the same variables that predicted a high ratio of courses completed to courses attempted, nor by the same variables as those that predicted the number of semesters likely to be completed within a given time period. In developing interventions to heighten success, academic planners need to consider two questions: (1) Which forms of success do they wish to enhance? and (2) Which interventions are most likely to produce the different forms of success? For example, the highest correlate of GPAs was the level of self-efficacy shown by the students; but the highest correlate of success on attempted credits was the students' approach to help-seeking. A student's level of self-efficacy is more difficult to raise than is that student's level of activity in seeking help from fellow students, faculty members, tutors, or advisors. Moreover, attempting to improve performance through multiple interventions on several kinds of success indicators can become much too expensive. The challenge for academic planners is designing

programs to improve performance through a match or connection between the type of success sought and the appropriate intervention, given available resources.

A second finding of the IRAHE study was that students' total scores on the DSP questionnaire were not as instructive in distinguishing high risk from high promise students as were profiles derived from the scores of the students on a different set of variables for risk than for promise. The high promise students tended to score high on a combination of self-efficacy, perception of themselves as accepted members of the college community, motivation, and seeing themselves as able to control their situations. Reflecting on these findings, IRAHE scholars underscored that race and ethnicity did not explain differences in achievement (IRAHE, 1997):

> it is not race *per se* that accounts for lower or higher success in learning, but other social, economic, and background educational conditions that impact some ethnic minority groups disproportionately. In other words, though we confirm that some ethnic minorities have lower success rates than Caucasians on some success measures, our data analyses show that it is not race or ethnicity that causes these discrepancies, but sets of other factors-in-combination that have comparable effects, whatever the ethnic group to which the individuals belong.

The IRAHE researchers further argued that factors other than demographics, such as student attitudes, beliefs, perceptions, and life situations, were important determinants of academic risk or promise:

> Our research has identified quite different profiles within ethnic groups between the low achiever and high achiever students. Analysis of the data yields unusually high correlations between one profile and low success rates and even higher correlations between a second profile and high success rates, regardless of the ethnicity of the individuals.

Much of the remainder of what was learned in both the study of earlier research and in the Diverse Students Program had a ring of common sense. For example, to be effective, outreach and recruitment of ethnic minority students needs to be timely, supported by ample resources and energy, and conducted by sources trusted by the prospective students and their families.

As common sense also suggests and as the IRAHE research indicated, distrust can offset any volume of repeated messages from sources suspected of inappropriate motives. Moreover information cast in terms that speak directly to the prospects' own priority needs will be more carefully heeded than data put in depersonalized catalogue form.

As is the case with many different groups of college students, ethnic minority students often need help prior to enrollment in choosing studies in which they can succeed, figuring out how their financial needs will be met, understanding how college studies will enable them to succeed in a career, and identifying what college will best match their needs and capabilities. If these aids are not available through family or school, the recruiting college will need to provide them.

Succeeding in college involves a balance of challenge and support: too little challenge and little is learned; excessive demands with minimal support can be a recipe for failure. With adults it can be especially complex to balance the demands of work, family management, study, and personal life.

Analyzing Student Success at PGCC

In a companion study and to correct a shortcoming of most earlier studies, researchers at Prince George's Community College (PGCC) in Largo, Maryland[1] gave special attention to the fact that community college students often enter with learning and credentialing goals other than those typical of four-year college students. Since the IRAHE multi-institutional research showed that different types of success were predicted by different factors and could best be improved by interventions tailored to the particular kinds of success being sought, Prince George's approach focused on their own students' primary interests in college and utilized a unique definition of achievement. This made the research of direct value to institutional planners in choosing how best to apply their funds to enhanced interventions.

Research Design. The PGCC research utilized a multi-stage study design using factor and cluster analyses to identify ten student profiles based on student academic intentions, preparedness, attendance patterns, course performance, and institutional support (Boughan, 1997). Each profile was further analyzed in terms of academic progress and achievement, socio-demographic background, and component factors to yield a comprehensive picture of who succeeds and who fails at this large, suburban, majority African-American open-admissions college. These

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[1]PGCC serves the residents of Prince George's County, a large (population 775,000) urban-suburban jurisdiction bordering the District of Columbia. PGCC's fall 1997 headcount of 11,962 was 65% female, 69% African-American, and 74% part-time.

findings were used to develop intervention programs targeting the most at-risk groups.

Definition of Achievement. Achievement was defined as the percentage of degree-seeking students graduating, transferring, or reaching sophomore status in good standing five years after initial enrollment at PGCC (Clagett, 1995). The study population was 2,386 first-time college students entering the college in fall 1990.

Factor Analysis. Preliminary analyses indicated extensive multicollinearity among the 90 variables available on college databases for model inclusion. Factor analysis was employed, resulting in the identification of ten factor scales. They are summarized in the Table 1, along with the proportion of variance in the achievement variable explained by each factor's direct and indirect effects (semi-partials were also calculated to assess each factor's direct effect) produced by a regression of all ten factors plus seven background variables ($R^2 = .469$).

While the factor analysis was conducted primarily for data reduction purposes prior to a series of regression analyses, the factors that emerged included a few surprises for the PGCC research team:

1. Five variables defined a factor (COMMIT) that was interpreted to represent student commitment to their studies: a flag for *both* day and evening course attendance, a flag for *both* campus and extension location attendance, enrollment in the last term studied, attendance during the summer, and change in program major. High correlations among these variables suggested extra effort in pursuing classes at PGCC.

2. Receipt of Pell Grants, participation in PGCC academic support services, and enrollment in career planning and study skills courses formed a factor (SUPPORT) distinct from college preparedness or developmental coursetaking.

3. Good academic standing in the first year correlated with consecutive enrollment in the first three major terms to form a factor representing early term survival and progress, characterized by the team as a successful LAUNCH.

4. Two factors emerged relating to college preparedness and remedial coursetaking. The first factor (PREPARED) was defined by high placement test scores, especially in mathematics, and *completion* of all required developmental courses. The second factor (REMEDIAL) reflected high incidence of developmental coursetaking and re-taking, low placement test scores in multiple skill areas, and at least one term of academic probation.

The other factors that emerged were straightforward and expected. These included factors representing steady enrollment, course performance, credit hour load, and curriculum choice/reasons for attending (job or transfer orientation).

Table 1. Factor Scale Interpretation and Achievement Variance Explained			
Factor Label	Interpretation	Defining Variables	r^2
COMMIT	Committed to studies	Attended both day/evening Attended both on/off campus Enrolled last term of study Attended summer session(s) Changed program major	.24
PERSIST	Attendance persistence/ continuity	Enrolled last term of study Number of major terms attended Continuous enrollment (no stop out)	.21
LAUNCH	Early term survival and progress	Enrolled first three major terms Good academic standing first year	.20
PERFORM	Course performance/ academic standing	Cumulative grade point average Earned/attempted credit ratio Proportion terms in good standing	.16
SUPPORT	Financial and academic support	Pell Grants received Minority Retention Prog/SSS participation Career planning/study skills courses	.12
LOAD	Course load carried	Mean major term course hour load Credit hour load in first term	.10
PREPARED	College preparedness/ completion of remediation	Developmental program completed Math placement test score Mean placement test score	.10
REMEDIAL	Need for basic skills remediation and stalled academic progress	Number of basic skill deficiencies Developmental courses in first year Number of developmental courses repeated Restricted academic status/probation No credit courses attempted	.10
JOBMOTV	Job-related attendance motives	Job/personal enrichment enrollment reason Occupational curricula	.03
TRANSEEK	Seeking bachelor's degree	Transfer curricula	.01

Regression Analyses. Several regressions were run to assess the contributions of various combinations of factor scales and background variables to explaining student achievement (see Table 2). Tinto's (1987) assertion that academic and

social integration are key to understanding student persistence has found support in most studies at four-year institutions. However, a growing body of literature suggests that social integration is *not* associated with persistence at two-year colleges. Pascarella and Chapman (1983), Fox (1986), Nora, Attinasi, and Matonak (1989), and Halpin (1990) found academic integration a significant influence on community college student persistence, but social integration either not associated or negatively associated with persistence. In their study at a public research university, Eimers and Pike (1997) found the importance of academic integration particularly acute for minority students. The PGCC study found support for the academic integration hypothesis, confirmed the findings of previous studies that socio-demographic background variables were not important correlates of achievement, and posited the existence of an important *personal motivation* component of academic achievement. This last component was unusual in that it derived from behavioral data rather than survey-based attitudinal scales.

Table 2. Alternative Regression Models and Achievement Variance Explained

Regression Model	Independent Variables Included	R^2
Whole model	All 10 factors plus 7 background variables	.469
Academic integration	LOAD, PERFORM, PERSIST, REMEDIAL	.355
Good start	PREPARED, LAUNCH	.256
Personal motivation	COMMIT, SUPPORT	.249
Socio-demographic	SES, race, gender, age ,marital, entry timing, HS quality	.104

Cluster Analyses. Institutional research, in contrast to educational research, is less interested in developing generalizable theory but rather most concerned with guiding college-specific policies and programs. Theoretical models of student

persistence and achievement can account for about half of the variance (Pantages and Creedon, 1978), and individual independent variables typically 14 to 16 percent (Cubeta, 1997). Not only do our best theories fail to account for half of the variance in student progress and achievement, the factors that affect persistence and achievement vary across institutions (Noel, 1978; Valiga, 1980). Thus each college must conduct research on its own students to guide intervention strategies to improve minority student achievement. To target programs to those most in need and most likely to respond to interventions, a campus must accurately *profile* its student body. Cluster analysis is useful for this purpose.

Using scores on the ten factor scales from the factor analysis, the cluster analysis yielded ten student clusters or study profiles (see Table 3). Three clusters were of particular relevance to this study of minority student achievement. The True Grit cluster, comprising nearly 10 percent of the cohort, overcame basic skills deficiencies and below-par high school backgrounds to attain above-average achievement levels--largely through strong motivation (high COMMIT scores). A fourth of the students in the Full-time Strugglers cluster, the least advantaged group (lowest socio-economic status, poorest high school backgrounds, highest mean REMEDIAL factor score) managed to achieve, with institutional assistance (with a mean SUPPORT score twice the cohort average). The Unpreppareds, similar to the Full-time Strugglers in socio-demographic background, need for remediation, study goals, curriculum choices, and course loads, had dramatically less success--less than one percent classifying as achievers. The Full-time Strugglers scored substantially higher on four factors: SUPPORT, COMMIT, LAUNCH, and PREPARED--the latter reflecting *completion* of developmental requirements.

Table 3. Selected Attributes of Student Profile Clusters Row Percentages						
Cluster	N	African-Am	SES Index	Skill Deficient	Good Start	Achievers
Dean's List	233	26	61	32	77	76
Scholars	158	42	45	40	79	68
Collegiates	342	25	62	36	73	66
True Grit	236	60	47	67	46	43
Pragmatists	106	41	50	54	55	30
FT Strugglers	134	80	34	92	73	25
PT Strugglers	254	49	49	67	54	17
Vanishers	168	35	55	37	12	11
Unpreparedes	369	80	42	100	34	<1
Casuals	386	52	49	33	10	<1
Total cohort	2,386	50	50	56	56	31

Correlates of Success of At-risk Ethnic Minorities at PGCC. What factors differentiated relatively successful from unsuccessful at-risk minority students at PGCC? Personal commitment and motivation, financial aid, participation in academic support services, completion of developmental requirements, and attendance in each of the first three major terms (fall-spring-fall).

Largely based on these findings, Prince George's Community College launched an initiative for crossing the boundaries and making connections between theory, institutional research, and academic planning in two areas: programming for at-risk students and academic curriculum development.

The R^3 Academy

The R^3 Academy was created as a direct result of analyzing the factors differentiating successful from unsuccessful at-risk, minority students at Prince George's Community College. In the fall of 1997, the R^3 Academy was created as a pilot program for students needing Developmental Math 003 plus remedial English and/or reading. Based on the learning community concept and incorporating all of the positive factors identified by the research, the Academy was designed to test whether highly-targeted college actions can improve the academic achievement of its at-risk minority students.

The R^3 Academy is a two-semester program of developmental and credit instruction. A group of selected students takes the same classes, working as a team with faculty, counselors, and advisors in a learning community. R^3 stands for *Reasoning, Readiness, Real World* rather than the expected reading, writing, and 'rithmetic. Its goal is to develop critical learning skills to prepare students for college level courses and real life issues.

Although only operating as a pilot program for 38 students needing developmental math plus remedial English and/or reading, the R^3 Academy has shown impressive results. The pilot program achieved a 97 percent fall-to-spring retention rate, compared to 60 percent for all new freshmen--including those not requiring developmental course work. After two semesters, the retention rate was 84 percent. As a result and in recognition of the pilot program's success, the college's Board of Trustees approved the R^3 Academy as one of its five strategic priorities for the 21st century.

The Data Action Memo and PGCC Curriculum Development

PGCC developed a new communication tool, the Data Action Memo, for crossing the boundaries and making connections between institutional research and planning. Appended to this paper is the first Data Action Memo sent to academic administrators and chairpersons in the fall of 1997. As the cover memo indicates, institutional research often produces findings that have immediate implications for instruction, student services, and marketing. Yet at many institutions, such valuable research rarely influences campus policies or programs. The Data Action Memo becomes a way of "translating" such research findings into policy options that prompt consideration by college decisionmakers.

The inaugural Data Action Memo serves as an example. Together, the research office's annual survey of high school students and a state report on popular undergraduate programs at four-year colleges revealed that many students were interested in majors other than those officially included in PGCC's curriculum and catalog. For example, as is the case at many community colleges, PGCC subsumed areas such as psychology, premedicine, and communications under an arts and sciences or general studies curriculum. Thus, to the naive reader of the catalog, the college did not offer courses or degree tracks in these areas.

The policy question generated by these findings asked whether there was a way to include such popular program options in college materials to inform prospective students that they could start their academic careers in these areas at the community college. As a result of suggesting action options in the area of curriculum development and college marketing, the college implemented the following changes:

1. New curriculum options in the popular areas were created and added to PGCC programs in arts and sciences and general studies.
2. Subsequent PGCC marketing literature promoted these new options in order to modify high school student perceptions about the college and its curriculum.
3. The more popular and traditional academic areas were highlighted in subsequent surveys of high school students.

Concluding Observations

The literature of higher education abounds with case studies of programs that work at *other* institutions. The problem is that we don't know whether the programs that work at neighboring or seemingly similar colleges will work at our institutions. By linking theory and institutional research to planning, we can have greater confidence that our decisions will be good ones and will serve the needs of diverse students.

The following steps are recommended in order to cross the boundaries and make connections between theory, research, and planning:

1. *Educational Theory*. The theoretical literature and national research should be consulted to guide institutional research and suggest possible models for intervention programs.
2. *Institution-Based Research*. Campus researchers should conduct sophisticated, institution-specific research focused on their college's needs and characteristics.

3. *Research-Based Planning Questions*. Researchers, after carefully analyzing national and institutional data, should frame research-based questions for college planners.

4. *Research-Based Action Plans*. Planners should work with researchers and other college administrators and faculty to implement, track, and assess selected action plans.

5 *Ongoing Assessment*. Outcome assessments should be used as a basis for program revisions and additional research and analysis.

Colleges and universities are environments that express different kinds of commitments and expected outcomes. Some institutions promote and foster intellectual growth, some emphasize "social life and community," others press for a sectarian or ideological commitment. However, a college that wishes to serve ethnic minorities well must express this aspiration in its mission and goals, in its strategies for furthering the aspirations of such students, in staffing itself with people attuned well to this purpose, and in planning that crosses boundaries and makes connections between theory, research, and academic programs.

References

Bers, T.H., and Smith, K.E. (1991). Persistence of community college students: The influence of student intent and academic and social integration. *Research in Higher Education* 32: 53--556.

Boughan, K. (1996). Student racial background and cohort 1990 four-year academic outcomes (Report EA96-6). Office of Institutional Research and Analysis, Prince George's Community College.

Boughan, K. (1997). Toward a model of the academic process: Summarizing cohort 1990 progress and achievement (Report EA97-6). Office of Institutional Research and Analysis, Prince George's Community College.

Clagett, C.A. (1995). An outcomes typology for community colleges. *Assessment Update* 7(4): 10-11.

Cross, K.P. (1981). *Adults as Learners*. San Francisco: Jossey-Bass.

Cubeta, J.F. (1997). The effects of social and personality variables on academic success and persistence. Unpublished doctoral dissertation, University of Connecticut.

Eimers, M.T., and Pike, G.R. (1997). Minority and nonminority adjustment to college: Differences or similarities? *Research in Higher Education* 38: 77-97.

Feldman, M.J. (1993). Factors associated with one-year retention in a community college. *Research in Higher Education* 34: 503-512.

Fox, R.N. (1986). Application of a conceptual model of college withdrawal to disadvantaged students. *American Educational Research Journal* 23: 415-423.

Gosman, E.J., Dandridge, B.A., Nettles, M.T., and Thoeny, A.R. (1983). Predicting student progression: The influence of race and other student and institutional characteristics on college student performance. *Research in Higher Education* 18: 209-236.

Halpin, R.L. (1990). An application of the Tinto model to the analysis of freshman persistence in a community college. *Community College Review* 17(4): 22-32.

Institute for Research on Adults in Higher Education. (1997). The outcomes of diversity in higher education: Factors affecting ethnic minority successes and comparative effectiveness of selected interventions. Grant proposal, University of Maryland University College.

Keeton, M.T., and Sheckley, B.G. (1994). A workable welcome for diverse students. *CAEL Forum and News*, Summer 1994.

Lewin, K. (1951). *Field Theory in Social Sciences*. New York: Harper and Row.

Noel, L., ed. (1978). *Reducing the Dropout Rate*. San Francisco: Jossey-Bass.

Nora, A., Cabrera, A., Hagedorn, L.S., and Pascarella, E. (1996). Differential impacts of academic and social experiences on college-related behavioral outcomes across different ethnic and gender groups at four-year institutions. *Research in Higher Education* 37: 427-451.

Norris, D.M. and Poulton, N.L. (1991). *A Guide for New Planners*. Ann Arbor: The Society for College and University Planning.

Pascarella, E., and Chapman, D.W. (1983). A multiinstitutional, path analytic validation of Tinto's model of college withdrawal. *American Educational Research Journal* 20: 87-102.

Sheckley, B.G. (1994). Unpublished memorandum. Institute for Research on Adults in Higher Education, University of Maryland University College.

Tinto, V. (1987), *Leaving College: Rethinking the Causes and Cures of Student Attrition*. Chicago: University of Chicago Press.

Valiga, M.J. (1980). Institutional variability in the causes of college attrition. Paper presented at the annual forum of the Association for Institutional Research, Atlanta.

Voorhees, R. (1987). Toward building models of community college persistence: A logit analysis. *Research in Higher Education* 26: 115-129.

Webb, M. (1989). A theoretical model of community college student degree persistence. *Community College Review* 16(4): 42-49.

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Dr. Craig Clagett is director of Institutional Research and Analysis at Prince George's Community College and current president of the North East Association for Institutional Research. Past president of the National Council for Research and Planning, he has published in numerous planning journals and made dozens of presentations at higher education conferences across the nation. He serves on the publications board of the Association for Institutional Research and the editorial boards of the *Journal of Applied Research in the Community College* and the AIR *Professional File*.

Dr. Isa Engleberg, vice president for Advancement and Planning at Prince George's Community College, has worked in both instruction and institutional planning. Author of two college textbooks, her journal publications include topics as disparate as college marketing, community college administration and pedagogy, curriculum development, and small group communication. In addition to making numerous conference presentations, facilitating professional workshops, and keynoting professional meetings, she chairs the Research Board of the National Communication Association and is a member of its administrative committee.

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October 7, 1997

MEMORANDUM

TO: Division Deans and Directors
Department Chairpersons

FROM: Dr. Isa N. Engleberg
Vice President for Advancement and Planning

SUBJECT: *Data Action Memo* #1 on Program Offerings

I am pleased to attach our inaugural *Data Action Memo* from the office of Institutional Research and Analysis. As I am sure you are aware, our research office prepares dozens of research studies annually. Many of the resulting research reports are required by law or are needed for administrative purposes. However, some of our studies produce findings that have immediate implications for instruction, student services, and marketing. The *Data Action Memo* will become our way of "translating" such research findings into policy options for administrators, faculty, and staff. Depending on the study and its findings, we will distribute *Data Action Memos* to those individuals and offices where the data and analysis can be transformed into action.

Our first *Data Action Memo* is based on our annual survey of high school students and a state report on popular undergraduate programs at four-year colleges. After reviewing the data, analysis, and-policy questions on the memo, please consider the following action options in the area of curriculum development and college marketing:

1. Add popular and traditional academic areas to our list of degree programs in future surveys and marketing efforts.

2. Reexamine the curriculum in general studies to determine whether specialized options in areas such as psychology, premedicine, and communications should be created and promoted. Currently, only art and music are included as general studies options. In FY99, an African American Studies option will be added to the general studies curriculum.

3. Focus promotional strategies on popular degree areas in order to modify perceptions about the college and its curriculum.

Please understand that the above action options are only suggestions for discussion. However, inasmuch as we are now engaged in the process of writing, editing, and printing our 1998-2000 catalog, we have a window of opportunity to enhance our curriculum in a way that will better and more accurately reflect its scope and, as a result, interest and attract more students.

If you have any questions or want more information about the research referenced in the *Data Action Memo*, please contact Dr. Craig Clagett, director of the office of Institutional Research and Analysis. If you want to discuss any of the above action items or want to suggest additional options, please feel free to contact me or your vice president.

sp
Attachment
c: President's Staff

DATA ACTION MEMO
Research with Policy Implications

PROGRAM OFFERINGS

Memo DM98-1 October 1997

Data

During 1995-96, as part of its Senior English Class Visitation Program, the Office of Recruitment distributed and collected a total of 2,959 survey questionnaires from high school seniors. The survey included a listing of PGCC programs to elicit student career interests. Findings included:

1. Half of the students did not know that PGCC offered courses in all the programs listed.

2. Three in ten high school students indicated they were interested in careers *other than those listed*. Most often cited were psychology, pre-medicine, communications, physical therapy, fashion merchandising, culinary arts, and journalism.

3. Three in ten did not know that they could complete the first two years of a four-year degree at PGCC and have all credits transfer to the university of their choice.

MHEC reports show that the most popular majors at Maryland four-year colleges commonly attended by county residents include biology, psychology, communications, and sociology.

SOURCES: *Survey of High School Students, 1995-96*, OIRA report MA97-4, April 1997; *Most Popular Undergraduate Programs at Selected Four-year Colleges*, OIRA report MA98-3, October 1997.

Analysis

Current listings of PGCC programs do not include a number of curriculum majors desired by prospective students, even though the college can deliver the first two years of study in these fields. Prospective students may believe they must enroll elsewhere if they are interested in these majors.

Policy Questions

1. How can we ensure that county high school students and adult learners know that they can complete the first two years of a bachelor's degree at PGCC, regardless of their choice of baccalaureate major?

2. Should PGCC add program options in the more popular fields to better inform prospective students that they can start their academic careers here?